

ALT Collapsible Taps

Acuation Deep Hole Tapping

- Long Life Tap Chasers
- Positive Collapsing Action
- Five standard tap bodies and thirty-three standard tap heads allow ALT Taps to produce 1-1/4" to 13-1/4" I.D. and 1-1/4" to 12" nominal NPT and BSTP pipethreads.
- Leadscrew feed is recommended for best thread results, however, it is possible to hand feed under certain conditions.
- Recommended where wide range of work requires the versatility and wide range coverage offered by detachable tap heads.
- Can be used, when supplied with suitable tooling, to produce right- or left-hand threads.
- Can be supplied for revolving or stationary applications.
- Extension links, extension adapters, and special long tap heads allow deep hole tapping.



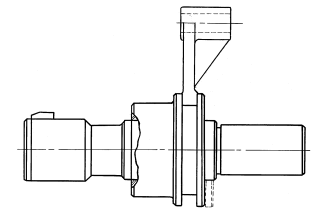
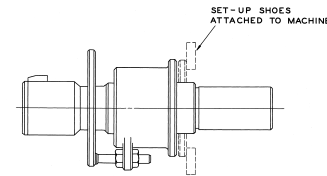
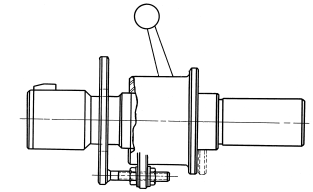
ALT Stationary Tap



ALT Revolving Tap



ALT Revolving Yoke Operated Tap



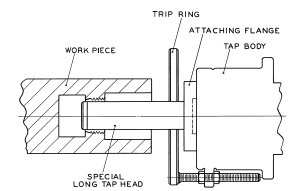
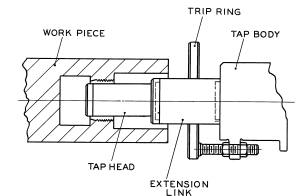
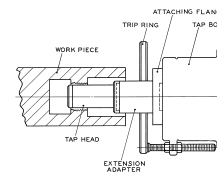
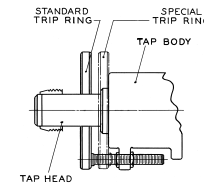
Stationary models can be converted in service to a rotary model by simply removing the expanding lever, installing a lever hole plug and providing an expanding means.

Here, collapsing action is accomplished by the trip ring contacting the workpiece. Set-up shoes attached to machine.

This illustrates a tap used on bar automatic machines or in other tapping applications where the workpiece location is constant. Available in the No. 2, 3, 4, 5 and 6 ALT models, this particular tap is both expanded and collapsed by means of the operating yoke. Information on tap applications for use on chucking machines should be referred to the Landis tap engineering department.

NOTE: All orders or inquiries for operating yokes must include the diameter of the yoke operating rod and the distance between the center line of the yoke operating rod and the center line of the spindle.

Deep Hole Tapping Options



ALT Collapsible Taps

SPECIFICATIONS

TAP SIZE	CHASERS	**STANDARD CAPACITY			**COARSEST PITCH	†††† THREAD LENGTH								WEIGHT				
		PER SET	INCHES	PIPE ††††		MM	INCH	MM	***RIGHT-HAND				***LEFT-HAND				LBS.	KILOGRAM
BODY NUMBER	***HEAD SIZE							††INCH	††MM	††INCH	††MM	††INCH	††MM	††INCH	††MM			
2 ALT	1-3/8	4	1-1/4 to 1-3/8		32 to 35	12	2.0									*8	*3.63	
	1-1/2		1-3/8 to 1-5/8	1-1/4	35 to 42			1-3/8	34.9	2-1/16	52.4	1-3/8	34.9	2-1/16	52.4	1-1/8	.511	
	1-3/4		1-5/8 to 1-7/8		42 to 48	1-3/8	34.9	2	50.8	1-3/8	34.9	2	50.8	2-1/2	1.13			
	2		1-7/8 to 2-5/16	1-1/2	48 to 59	10	2.5	1-9/16	39.6	2-3/16	55.5	1-9/16	39.6	2-3/16	55.5	2-3/4	1.24	
3 ALT	1-3/8	4	1-1/4 to 1-3/8		32 to 35	12	2.0	2-1/4	57.1	2-3/4	69.9	2-1/4	57.1	2-3/4	69.9	2	.908	
	1-1/2		1-3/8 to 1-5/8	1-1/4	35 to 42			2-1/4	57.1	2-3/4	69.9	2-1/4	57.1	2-3/4	69.9	2-1/4	1.02	
	1-3/4		1-5/8 to 1-7/8		42 to 48	10	2.5	2-1/2	63.5	3-3/32	78.6	2-1/2	63.5	3-3/32	78.6	2-1/2	1.13	
	2		1-7/8 to 2-5/16	1-1/2	48 to 59	10	2.5	2-1/2	63.5	3-3/32	78.6	2-1/2	63.5	3-3/32	78.6	3-1/4	1.47	
	2-1/2	5 R.H.	2-5/16 to 2-3/4	2	59 to 70	8	3.0	2-15/16	74.6	3-1/2	88.9	2-7/8	73.0	3	76.2	3-1/2	1.58	
	3	4 L.H.	2-3/4 to 3-1/4	2-1/2 O.H.	70 to 83			3-3/4	95.2	3-7/8	98.4	3-3/16	81.0	4-1/2	2.04			
4 ALT	1-1/2	4	1-3/8 to 1-5/8	1-1/4	35 to 42	12	2.0	2-1/16	52.3	2-7/8	73.0	2-1/16	52.3	2-7/8	73.0	3-1/4	1.47	
	1-3/4		1-5/8 to 1-7/8		42 to 48			10	2.5	2-7/16	61.8	3-1/16	77.8	2-7/16	61.8	3-1/16	77.8	3-1/2
	2		1-7/8 to 2-5/16	1-1/2	48 to 59	10	2.5	2-7/16	61.8	3-1/16	77.8	2-7/16	61.8	3-1/16	77.8	3-3/4	2.38	
	3		5 R.H.	2-5/16 to 2-3/4	2	59 to 70	8	3.0	3-1/16	77.7	3-3/4	95.2	3-1/16	77.7	3-3/4	95.2	4-1/2	2.04
	4	4 L.H.	2-3/4 to 3-1/4	2-1/2 O.H.	70 to 83	3-1/16			77.7	3-3/4	95.2	3-1/16	77.7	3-3/4	95.2	5-1/2	2.49	
	3-1/2	6	3-1/4 to 3-3/4		83 to 95	6	4.0	4	101.6	4-1/4	107.9	2-3/4	69.8	3	76.2	6-1/4	2.83	
	4		3-3/4 to 4-1/4		95 to 108			3-3/4	95.2	4-1/4	107.9	2-3/4	69.8	3	76.2	7-1/4	3.29	
	4-1/2		4-1/4 to 4-3/4		108 to 121	6	4.0	3-5/8	92.0			2-5/16	58.7	2-15/16	74.6	10	4.54	
5	5-1/2 to 6-5/8		5-6 O.H.	140 to 165												*50	*22.07	
5 ALT	1-3/4	4	1-5/8 to 1-7/8	1-1/4	42 to 48	10	2.5	2-3/8	60.3	3-1/16	77.8	2-3/8	60.3	3-1/16	77.8	3-1/2	1.58	
	2		1-7/8 to 2-5/16	1-1/2	48 to 59			2-3/8	60.3	3-1/16	77.8	2-3/8	60.3	3-1/16	77.8	3-3/4	2.38	
	2-1/2		5 R.H.	2-5/16 to 2-3/4	2	59 to 70	8	3.0	3-11/16	93.6			2	50.8	2-3/4	69.9	4-1/2	2.04
	3		4 L.H.	2-3/4 to 3-1/4	2-1/2 O.H.	70 to 83			3-11/16	93.6	4-1/2	114.3	3-3/8	85.7	4-1/16	103.3	7	3.17
	3-1/2	6	3-1/4 to 3-3/4		83 to 95	6	4.0	3-11/16	93.6			4-5/16	109.5	5-1/8	130.2	8	3.63	
	4		3-3/4 to 4-1/4		95 to 108			3-11/16	93.6	4-1/2	114.3	4-5/16	109.5	5-1/16	128.7	9	4.08	
4-1/2	4-1/4 to 4-3/4		4 O.H.	108 to 121	6	4.0	4-1/8	104.7	4-1/2	114.3	4-1/8	104.8	4-3/8	111.1	12-1/2	5.67		
5	4-3/4 to 5-1/2		4-1/2 O.H.	121 to 140	6	4.0	3-7/8	98.4	4-3/8	111.1	3-7/8	98.4	4-3/8	111.1	18	8.17		
6	5-1/2 to 6-5/8	5-6 O.H.	140 to 165													*70	*31.78	
6 ALT	7	6	6-1/2 to 8	6-7 O.H.	165 to 203	6	4.0	3-3/8	85.7	4-5/16	109.5	3-3/8	85.7	4-5/16	109.5	27	12.25	
	8		7-1/2 to 9	7-8 O.H.	190 to 229			3-3/8	85.7	4-5/16	109.5	3-3/8	85.7	4-5/16	109.5	36-1/4	15.45	
	9		8-1/2 to 10	8-9 O.H.	216 to 254	6	4.0	3-1/2	88.9	4-3/8	111.1	3-1/2	88.9	4-3/8	111.1	43	19.52	
	10		9-1/2 to 11-1/4	9-10 O.H.	241 to 286			3-1/2	88.9	4-3/8	111.1	3-1/2	88.9	4-3/8	111.1	54	24.51	
	11	10 R.H.	10-1/2 to 12-1/4	10-11 O.H.	267 to 311	6	4.0	—	—	—	—	—	—	—	—	63	28.60	
	12	Only	11-1/2 to 13-1/4	11-12 O.H.	292 to 337			—	—	—	—	—	—	—	—	—	70	31.78

* Weight of tap body. Additional weights shown pertain to individual tap heads.

** The coarsest pitch limitations given pertain to tapping steel and are subject to change when tapping other materials.

*** Separate heads are required for tapping right- and left-hand threads. As shown by the "Thread Length" columns, thread lengths can vary between comparable sizes of right- and left-hand tap heads. Special, extra length, tap heads can be supplied to produce longer lengths.

† Total thread marking which can be produced including the chaser throat (thread run-out) section.

†† This column represents the total thread marking that can be produced by tap heads incorporating trip rings.

††† This column represents the total thread marking that can be produced with tap heads that are used for applications which do not require the use of a trip ring.

†††† Regular chasers are used to thread the pipe sizes listed except those followed by O.H. which require overhang chasers. Pipe sizes listed are full threads (L₁ plus L₃) as per "H28 Handbook-Screw Standards for Federal Services," using chasers with 30° throats starting 1/64" below the thread root.

ALT Collapsible Taps

DIMENSIONS

No. OF BODY	SIZE OF HEAD	DIA. OF NOSE	CHASER TO CAP FACE	DIA. OF SHANK		LENGTH OF SHANK	MORSE TAPER SHANK	** LENGTH OF HEAD	LENGTH OF TAP	DIA. OF TRIP RING	DIA. OF COLLAR	SWING OF TRIP COLLAR	DIA. OF BODY	DIA. OF BODY FLANGE	WIDTH OF YOKE GROOVE	DIA. OF YOKE GROOVE
				STD.	MIN.											
		A	M	F	F	G	No.	E	D	B	C	H	I	J	K	L
2 ALT	1-3/8"	1-3/32"	.194	1-1/2"	1-1/4"	3-1/4"	4	2-11/16"	6-1/16"	4-3/16"	3-7/16"	2-3/16"	1-11/16"	1-11/16"	.500"	2-31/32"
	1-1/2"	1-3/16"	.194													
	1-3/4"	1-27/64"	.194													
	2"	1-43/64"	.194													
3 ALT	1-3/8"	1-3/32"	.194	1-1/2"	1-1/4"	3-1/2"	5	3-7/16"	7-5/16"	5-5/16"	4-1/2"	2-13/16"	2-3/8"	2-3/8"	.5625"	3-1/2"
	1-1/2"	1-3/16"	.194													
	1-3/4"	1-27/64"	.194													
	2"	1-43/64"	.194													
	2-1/2"	2-7/64"	.250													
	3"	2-1/2"	.250													
4 ALT	1-1/2"	1-3/16"	.194	1-3/4"	1-1/4"	4"	5	4-9/16"	9-1/8"	6-1/8"	5-1/4"	3-1/4"	3"	3"	.750"	4-1/4"
	1-3/4"	1-27/64"	.194													
	2"	1-43/64"	.194													
	2-1/2"	2-7/64"	.250													
	3"	2-1/2"	.250													
	3-1/2"	3"	.312													
	4"	3-1/2"	.312													
	4-1/2"	4"	.312													
5 ALT	1-3/4"	1-27/64"	.194	2-3/4"	1-3/4"	4"	5 OR 6	5-1/4"	11-3/8"	7-1/4"	5-1/4"	3-11/16"	3"	4"	.750"	4-1/4"
	2"	1-43/64"	.194													
	2-1/2"	2-7/64"	.250													
	3"	2-1/2"	.250													
	3-1/2"	3"	.312													
	4"	3-1/2"	.312													
	4-1/2"	4"	.312													
	5"	4-1/2"	.500													
6"	5-1/4"	.500														
6 ALT	7"	6"	.500	2-1/2"	1-1/4"	5"	6	3-15/16"	10-15/16"	11-1/2"	7-1/8"	6-15/16"	4-1/2"	6"	1.000"	6-1/8"
	8"	7"	.500													
	9"	8"	.500													
	10"	9"	.500													
	11"	10"	.625													
	12"	11"	.625													

* Special size tap head for this body. Price different from standard.
 ** Length of R.H. heads—consult factory for L.H. head lengths.

Ordering Instructions

All orders or inquiries should specify the style of tap required, whether stationary or rotary type, and the size and style of shank. Complete thread specifications, material specifications and whenever possible, the workpiece drawing should be submitted. If a drawing is not available, complete information as to whether standard chasers for "open hole" work or overhang chasers for "bottoming" work are required. If overhang chasers are ordered state amount of relief at the bottom end of the thread. Also specify if tap will be fed manually or by leadscrew.

